Application No. 09/892,469
Date November 25, 2003
Reply to office action of January 15, 2003

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A method of making a continuously chirped highly accurate gain flattening filter in a single Bragg grating in an optical waveguide ~~material,~~ material, including the steps of:

- disposing a strongly chirped phase mask placed between a light beam and the optical waveguide material, the light beam being capable of changing the effective index of refraction of the optical waveguide material, and

- irradiating said optical waveguide material with said light beam non-uniformly through the phase mask, said irradiation producing ~~a suitable~~ an approximate filter response and ~~required~~ attenuation over the filter band,

- replacing said phase mask with a movable, adjustable slit to irradiate selected portions of said filter, for predetermined periods of time, while monitoring said filter response, comparing said filter response to a target response, and ceasing irradiation when said filter response is in agreement with said target response.

2. (Original) A method as defined in claim 1 in which the light beam is an ultraviolet light beam.

3. (Original) A method as defined in claim 1 in which an amplitude mask is used to control the amount of light along the grating.

4. (cancelled) A method as defined in claim 1 in which a moveable slit is used to control the amount of light along the grating.

5. (Original) A method as defined in claim 1 in which the optical waveguide material is an optical fiber.

6. (Original) A method as defined in claim 1, further including the step of stabilizing said change in effective index of refraction in the optical waveguide material.